

TRAPPING METHOD AND SYSTEM FOR ENERGY CONVERSION DEVICES

ABSTRACT OF THE DISCLOSURE

A trap for an energy conversion device comprises a trapping system comprising a filter element and a trap element, and fluidly coupled to a reforming system. The trapping system is monitored by a combination of devices including an on-board diagnostic system, a temperature sensor, and a pressure differential sensor, which can individually or in combination determine when to regenerate the trapping system. The method for trapping sulfur and particulate matter using the trapping system comprises dispensing fuel into the energy conversion device. The fuel is processed in a reformer system to produce a reformate. The reformate is introduced into the trapping system and filtered to remove particulate matter and sulfur.